

What is claimed is:

1. A motor retractor system, comprising:

a seat belt;

a first winding device attached to one end of the belt and

5 having a motor for winding the same;

a second winding device attached to the other end of the belt and having a tension-applying device for always applying a tension to the belt for winding the same;

a through-tongue slidably attached to the seat belt;

a buckle to be connected to the through-tongue,

a detecting device attached to at least one of the through-tongue and the buckle for detecting a release of the through-tongue from the buckle; and

a control unit electrically connected to the detecting device and the first winding device for actuating the motor upon the release of the through-tongue from the buckle detected by the detecting device.

2. A motor retractor system according to claim 1, wherein the

20 control unit turns on the motor of the first winding device to wind the belt when the through-tongue is released from the buckle.

3. A motor retractor system according to claim 1, further

comprising first and second belt-storage detecting means disposed

25 in the first winding device and the second winding device, respectively, for detecting stored states of the belt in the respective winding devices.

4. A motor retractor system according to claim 1, wherein when the belt is in use, only the second winding device generates tension.

5 5. A motor retractor system according to claim 3, wherein when the first belt-storage detecting means detects a predetermined amount, the control unit stops winding operation of the first winding device.

6. A motor retractor system according to claim 1, wherein said seat belt includes a shoulder portion connected to the first winding device, and a lap portion connected to the second winding device.